### Goal A: Reinforce and Implement a Strong Vision for Sustainable, Multiple Use of Maine's Nearshore and Coastal Resources

#### Introduction

Over the course of the bay management study, many terms were used by participants to describe the types of improvements they envisioned in nearshore governance. Regardless of the term used – integrated coastal management, ecosystem management, or place-based management were a few of the terms used – characteristics of this "systems change" included:

- State leadership to articulate and foster new approaches within state government, and to help guide and inspire regional and local efforts;
- Consideration of coastal systems as a whole; integration of environmental goals and social needs; avoidance of single sector approaches; and,
- Efficiency, accountability and visibility of government efforts; knowledge of when and how we are making progress

Maine state government alone has seven agencies and tens of individual programs that plan for and manage some aspect of coastal and nearshore development, conservation and protection. While Maine has a networked coastal management program (the Maine Coastal Program) and a coastal policies statute that requires an integrated approach by state and local government, our basic framework needs to be strengthened and implementation improved. Additionally, there is no high-level coordination mechanism specifically charged with oversight of coastal and nearshore management and policy development.

Among the myriad existing programs that are involved in the coast and nearshore, there are established coordination mechanisms between some programs (for example, the Overboard Discharge Removal program at DEP and the Shellfish Classification Program at DMR); however, other programs are not similarly coordinated. Because programs are operated by different agencies and publicized in separate print materials and websites, there is also a lack of high quality, comprehensive information to help the public understand how programs work in conjunction to protect and improve coastal environmental quality. Even state agency staff is not always aware of disparate but related programs, funding sources and contacts.

A better articulated, shared, and well-recognized policy framework for management of nearshore uses and resources would support a number of important public policy purposes, such as:

- Expression of state leadership and high-level commitment to coastal and nearshore management;
- Establishment of basic principles to guide implementation;
- Development of measurable management objectives and a means of gauging progress;

- Creation of a framework for regional and local efforts;
- Development of priorities and preferences for support of regional and local nearshore management efforts;
- Development of a more structured approach to interagency coordination;
- Increased public understanding of agency programs; and
- Improvement of prospects for outside funding.

Recommendation A-1: Implement Maine's existing *Coastal Policies Act* by identifying specific nearshore and coastal management goals for state agencies and municipalities, creating measurable objectives and conducting progress reports

Maine's Coastal Management Policies Act ("Act"), 38 MRSA §1801, et seq., (http://janus.state.me.us/legis/statutes/38/title38sec1801.html see also Appendix C) provides a basic policy framework and establishes goals for management of the State's nearshore embayments and other coastal areas<sup>1</sup>. Simply put, the Act's vision for the coast is one where multiple uses coexist; where a variety of uses are accommodated and managed in a way that serves to protect and conserve certain key coastal attributes. The Act provides that "state and local agencies and federal agencies ... with responsibility for regulating, planning, developing or managing coastal resources, shall conduct their activities affecting the coastal area consistent with" the ... policies aimed at "striking a carefully considered and well reasoned balance among the competing uses of the State's coastal area:"

This recommendation proposes the use of the existing Coastal Policies Act as a framework for the development of an interagency coastal strategic plan. Formal amendment of the Coastal Policies Act is not recommended at this time. The rationale for this determination is that the policy issues discussed in the Act cover the full range of current issues with the exception perhaps of coastal energy development and regional management. However, coastal resources that could potentially be impacted by coastal energy development are appropriately referenced in the policies. Likewise, references to state and local cooperative management (policy #5) could be construed to include regional management without amending the Act.

Task 1. Develop a pilot interagency coastal and nearshore strategic plan SPO (with DMR, DEP, DOC and IF&W) should pilot the development of an interagency strategic plan with a subset of coastal policy topics relevant to nearshore management. A suggested beginning would include Policies #2, 5 and 8 (Marine Resources, Cooperative Management and Water Quality, respectively.) A pilot strategic plan could develop lessons learned regarding: desired level of detail, information needed, level of staff effort required, obstacles to effective strategic planning, benefits to agencies of the effort, methods for effectively focusing on the integration of topics, etc.

<sup>&</sup>lt;sup>1</sup> The Act defines the "coastal area" as "all coastal municipalities and unorganized townships on tidal waters and all coastal islands. The inland boundary of the coastal area is the inland line of coastal town lines and the seaward boundary is the outer limit of the United States territorial sea." 38 MRSA §1802, sub-1.

Timeline --

Spring-Summer 2007 Preliminary work completed;

Summer-Fall 2007; Completion of plan

Winter 2007-2008 Development of annual workplan for proposed CZM-

funded activities to implement strategic plan elements

Winter 2009 Create and distribute progress report on pilot topics

Cost – existing resources

### <u>Task 2.</u> Evaluate the effectiveness of the pilot strategic plan and expand interagency strategic planning for other coastal and nearshore topics

SPO should lead a more robust interagency coastal strategic planning effort, centered on a broader suite of coastal policies and aimed at ensuring continued improvement of state efforts to implement and integrate the Act's policies. The proposed five-year cycle synchs with related coastal zone management program assessment and improvement planning required by NOAA under Section 309 of the CZMA. Assessment and strategy documents prepared under Section 309 include a public participation component.

Timeline: 2010, and on a five-year cycle

Cost: \$20,000 CZM funds

# Recommendation A-2. Create a marine subcommittee of the Land and Water Resources Council to ensure an ongoing, policy-level forum for consideration of nearshore issues of concern to multiple agencies and the public.

The Land and Water Resources Council ("LWRC") formerly had a subcommittee on marine policy that was disbanded sometime in the 1990's. In order to track the progress of the bay management study and to review study outcomes in a more focused way, the LWRC established a subcommittee of management staff from SPO, DEP and DMR. Based on an annual assessment of marine policy issues, it is recommended that this subcommittee be reconstituted (and potentially expanded) and meet at the LWRC's direction for the purposes of:

•	networking and information sharing	•	creation of new coastal policies and proposals
•	assessment of coastal trends	•	resolution of agency conflicts
•	examination of coastal problems or conflicts	•	oversight of progress on coastal communication and coordination
•	planning for emerging coastal uses	•	establishment of interagency teams, as needed, based on area- specific assignments or issue- area assignments

Task: Establish marine subcommittee of LWRC; provide staff support to subcommittee

Timeframe: Spring 2007; meetings quarterly or as needed

Cost: none anticipated

### Recommendation A-3 – Improve coordination of agency outreach and information efforts.

Create a comprehensive outreach strategy for coastal and nearshore management to consist of print materials, linked internet sites, and simple matrices that include program descriptions, laws and regulations, funding and other resources available, and contact information. Some of the existing efforts to be highlighted might include those in the box at the right:

Task 1: Inventory existing outreach materials and web sites of nearshore programs and projects Timeframe: December 2007

Costs: \$5,000 CZM

Task 2: Create new coordinated materials and websites

Timeframe: December 2008 Costs -- \$10,000 CZM

- State pump out facilities plan
- Development of Total Maximum Daily Loads (TMDLs) for coastal areas
- Designation of no-discharge areas
- Water quality classification system
- OBD removal program
- Septic system replacement efforts
- Dredging Management Action Plan
- Port and waterfront development
- Cruise ship visitation development
- Intermodal transportation plans
- Public access planning and facility development
- Energy facility siting
- Marine-related economic development



### Goal B: Create Mechanisms to Improve Nearshore Management and More Effectively Involve Local Citizens by Adapting the Scale of Management to the Regional Level

#### Introduction

The Legislative directive that established the bay management study called for an analysis of: existing governance; governance improvements; opportunities for limited local authority; and criteria, standards and guidelines to inform volunteer efforts.

Study participants spent very little time focusing on strictly local governance approaches for the following reasons:

- Most embayments in Maine are bounded by more than one town. Isolated, individual municipal efforts would not likely affect change in coastal waters.
- State responsibilities for managing public trust resources for all Maine citizens would be difficult to manage at the municipal level where interests might be strictly local.
- Municipalities already have opportunities for achieving delegated authority for some aspects of nearshore development under the Site Location of Development Act and the Natural Resources Protection Act. Only \_\_ municipalities have this delegated authority.

As evidenced by numerous case studies researched for this study effort, effective coastal and nearshore management frequently involves working beyond local political boundaries at a regional scale. Thus, study participants focused on an apparent missing link in our nearshore governance structure, that is, regional management. In addition to working at a more effective scale in a coordinated way, regional initiatives also provide a forum for individuals and groups to become involved in the management of the coastal waters around which they live.

The fact that regional approaches can be successful has been proven in Maine. Many people have pointed to the Maine Lobster Zone Councils as a structure that has allowed lobster management to be tailored to a more effective scale. Similarly, cooperative agreements around shellfish management, such as the Damariscotta River Regional Management Program or the Georges River Clam Project, provide a mechanism for harvesters to work together to create and maintain productive clam flats. Other regional efforts are listed in Appendix D.

While these two examples each illustrate the gains that can be made by coordinated efforts focused on a single marine species, it is also possible to imagine a region working together to better understand and manage the effects of multiple activities in a bay. There are a wide range of activities that groups could undertake to move them toward that goal. There is also much that the State could do to encourage regional thinking, foster these efforts, improve their chances for success, and in doing so, make significant advances in improving the management of Maine's nearshore marine environment.

Having arrived at a seemingly appropriate scale of management, study participants began an exploration of the potential structure for a regional approach in Maine, focusing on the following elements:

- Should regions be formally defined around Maine's embayments?
- Are new legal authorities needed or advisable?
- If formal authorities are not needed, what mechanism can be used to formalize regional efforts?
- What criteria, if any should guide regional efforts?
- How should the state support and create incentives for regional efforts?

The following recommendations address each of these considerations.

### Recommendation B-1 Do not create new formal management areas for bay management.

For the purpose of supporting regional initiatives, we do not see a need to formally divide the coast into new planning units. Rather, entities involved in marine and coastal resource issues should "self-define" their geographic area of focus to correspond to the issues and projects they are working on. Existing information about regional characteristics (e.g. Beginning with Habitat coastal focal areas) and regional service areas (e.g. regional planning areas) might be constructs that influence regional projects (See Appendix E).

### Recommendation B-2 Do not, at this time, create new decision-making authorities at either the regional or local level for nearshore permitting or management.

As acknowledged by the two pilot projects and echoed by some municipal representatives at public hearings, there is a lack of capacity at the local and regional level to take on new formal responsibilities for managing nearshore resources. Should that capacity improve over time, Maine's existing interlocal agreement law (include citation) could be used by towns and regional organizations to jointly exercise certain authorities as described below.

# Recommendation B-3 Encourage formal mechanisms for multi-town cooperative management of nearshore resources agreements. Continue to research state participation in interlocal agreements.

One potential approach to bay management involves encouraging municipalities to work together, possibly with state agencies, to manage or plan for nearshore activities at a regional level through the use of interlocal agreements. As contrasted with initiatives undertaken by non-governmental organizations, this approach ensures that municipalities, and thus elected local officials, are vested participants with the ability to implement recommendations and political accountability to potentially affected communities [see Appendix F for background on interlocal agreements]. By way of example, two or more municipalities could agree to jointly manage certain nearshore activities on a regional basis include mooring locations, public access, waterfront development, shoreland zoning, shellfish management, permitting of docks and piers or other coastal matters over

which the municipalities currently have jurisdiction. Interlocal agreements can only be used for the joint exercise of existing authorities.

One or more municipalities could also enter into an agreement with one or more state agencies to jointly exercise authority that is currently only exercised by a state agency. For example, if broadly interpreted, a state agency could share its authority to issue leases or permits or do submerged lands planning with municipalities that are parties to the agreement, or create a third, regional entity, with state and local representation, to make leasing, permitting or planning decisions.

<u>Task 1: SPO will collect or develop model ordinances or other advice to assist towns in creating interlocal agreements regarding nearshore resources.</u>

Timeframe – December 2008

Cost -- \$5,000 CZM

<u>Task 2: Explore possible incentives to encourage towns to use interlocal agreements.</u>
Coastal Program staff at SPO and DMR staff will participate in ongoing discussion about reform of Maine's Growth Management Act and subsequent efforts to create incentives for regional partnerships.

Timeframe – December 2008

Costs – staff time

Task 3: Conduct legal analysis and sponsor meetings to determine the ability and extent to which state agencies are willing to jointly exercise certain authorities with towns through interlocal agreements. Because a provision of the interlocal agreement statute bars delegation of "essential legislative authority" to a joint authority, the scope of state agency authority that may be shared and the manner in which that authority may be shared pursuant to an interlocal agreement are not entirely clear.

Timeframe: 2007-2008

Cost: Sea Grant Law Center proposal pending

### Goal C: Ensure that Regional Initiatives Complement the State's Vision and Help Meet State Goals for Nearshore and Coastal Management

Regional efforts cannot be expected to help meet state nearshore and coastal management objectives without clear guidelines and support. The following guidelines and criteria are suggested for regional efforts that receive state funding and/or staff support and would be formally established in request for proposals, contract documents and memoranda of understanding.

### • Projects eligible to receive staff and funding support should demonstrate relevancy to state goals and objectives for nearshore management

Regional entities may request support for a wide range of activities including capacity building, stewardship activities, the development of action plans, scientific research or data collection, and initiatives designed to identify and meet local needs. Rather than specify activities that would or would not receive support, a group should demonstrate that their approach is consistent with the Coastal Policies Management Act and any subsequent nearshore management goals and priorities adopted to implement the Act.

### • Projects eligible to receive staff and funding support should demonstrate adequate stakeholder participation

Several types of organizations may request assistance from state agencies, including advocacy groups, municipalities, 'neutral' organizations, and those that are newly formed for the purpose of regional coastal management. These entities may contain specific stakeholder groups or a wide range of stakeholders. Rather than specifying what type of group is eligible for support, the entity should demonstrate that it is constituted as needed to tackle the task it is proposing, for example, involvement of two or more municipalities with commitment to implement the initiative (pursuant to an interlocal agreement if necessary); balanced representation of the range of stakeholder interests (if applicable); or the presence of partnerships with other relevant organizations.

#### • Organizations should have sufficient capacity to carry out proposed tasks

Entities carrying out bay management initiatives will have different organizational capacities and relationships with others in their region. While different types of entities may receive support depending on the type of project, there are some guidelines that will help evaluate the ability of an entity to carry out its proposed work. These include:

- \* appropriate staffing levels;
- \* matching funds;
- sustainability of effort after state support;
- \* ability to use scientific information;
- \* measurable objectives by which the efficacy of the initiative may be assessed.

### • Initiatives should conduct work on a regional scale

While there is no one scale at which regional initiatives should be conducted, the initiative should include or consider a regional perspective. This may take several forms, including:

- Engaging all towns adjacent to water body being discussed;
- Using biophysical rather than political boundaries;
- Developing and using regional-scale data;
- ❖ Considering impacts from or to the surrounding region.

#### • Initiatives should not duplicate or conflict with other efforts

While the state may support more than one project (activity based) in a region, projects should demonstrate that they are not working at cross purposes. Multiple initiatives working at the policy/planning level in any one region will not be eligible for support.

### • Initiatives should commit to, and be capable of using, best available and appropriate information

There are many types of data and information that may be appropriate for use in any given project. An initiative will need to document their intention to use or develop information including: appropriate Geographic Information System maps; local knowledge; and, available scientific information.

## Goal D: Improve the Effectiveness of Management of Coastal and Marine Resources that Cross Jurisdictional Boundaries by Increasing the Number and Effectiveness of Regional Efforts

#### Introduction

The two pilot projects (Taunton Bay and Muscongus Bay) provide examples of how regional projects benefited from State guidance and support. This recommendation to continue and increase support for regional initiatives was designed to incorporate the lessons learned by the pilot projects (See Information Gathered: pilot projects). Specifically, the results of the pilot projects point toward an approach which would "enable a bay scale of management to emerge locally (with state oversight and support) as opposed to a single governance structure and administration mandated by the state for all bays" (Muscongus Bay Final Report, p. 7). The mechanism that this study proposes to accomplish this is for the State to provide assistance (information, financial or technical support) to foster and encourage those entities that are focused on carrying out activities that support improvements to nearshore waters and habitats in ways that are most meaningful to them. These regional activities are meant to fill an identified gap in the Maine's management framework, and to compliment current federal, state and local level efforts. In addition to the assistance that is provided, it was noted that regional efforts would gain some credibility and legitimacy in the eyes of potential participants if the state had endorsed these kinds of efforts in a demonstrable way (Muscongus Bay Final Report p. 8).

In order to avoid being prescriptive in the types of efforts that could or would be supported, this recommendation is structured instead around the types of support the State could provide to regional initiatives. This ranges from a basic, general level of support that would be broadly available, to more targeted support that might be accessed competitively by a more limited number of regional groups.

### Recommendation D-1 Make basic information about Maine's coastal waters available to a wide variety of potential users and regional partners

Information in the form of online resource materials or improved access to data about a Maine's estuaries and nearshore waters should be made widely available to the public, members of coastal conservation groups and other entities. Once the materials or data distribution methods are developed, an entity interested in nearshore management would be able to access this information and use it with minimal assistance from state staff.

Task 1: Develop an educational resource (e.g. brochure or website) that provides a summary of the existing programs, resources and laws that can be used to inform regional efforts (See task A-3 above)

Example: A group might want to compile existing water quality monitoring results for coastal waters in order to look for trouble spots in which they will focus their attention. By accessing a central data repository, a group could focus their efforts on creating an action plan.

Recommendations -

Task 2: Create a system for improved access to bay-specific or regional data (see data and information section for specific recommendations).



### Recommendation D-2 Provide limited-duration, project- or problem-specific support to regional efforts.

Emerging regional efforts and established initiatives may need short term support from, or limited consultation with state agency staff. For example, state staff might assist in developing a study design for a volunteer monitoring effort, help interpret and apply existing scientific data, present information about coastal land use planning, or assist in mediating a conflict between marine user groups. Limited assistance by state staff could also help with shellfish management plans, eelgrass or other types of habitat restoration plans, harbor management and public access plans. Under this scenario a staff person from the appropriate agency(s) would assist a group on a specific issue by providing needed information, presenting materials a meeting, conducting a workshop, participating in a short-term planning effort or recommending other resources.

### <u>Task 1: Conduct interagency discussions and create more effective support for coastal regions.</u>

SPO will lead discussions with other agencies to a) understand how and if their coastal programs could be enhanced through working at the regional level; b) to clarify the degree and amount of support that the agencies have available to regional coastal initiatives; c) to prioritize which regions receive support; and, d) to decide whether new mechanisms like formalized interagency teams or designation of single points of contact are needed.

# <u>Task 2: Assess the needs of regional planning commissions, fisheries resource centers, regional land trusts and other existing organizations that provide support to towns and citizen groups and create partnerships to improve services.</u>

Regional organizations with sufficient technical capacity can no doubt provide more effective support (training, GIS support, etc.) to bay-level efforts than state government. However, it is likely that existing organizations will need to "tool up" to provide services to regional nearshore management initiatives. Enhanced partnerships between state agencies and existing regional service providers could result in better products such as presentations, training modules and technical assistance materials. Examples include training modules on topics such as: facilitation, nearshore marine science, linking town planning with nearshore water quality; capacity building; and sustaining local efforts.

Tasks 1-2 Timeframe --

June 2007 Complete discussions with state agencies and needs assessments

for existing regional efforts

December 2008 Publicly roll out program to support regional initiatives

Cost: 1 FTE at SPO

### Recommendation D-3 Provide support in the form of funding and/or staff assistance to one or more regional initiatives

The bay management study pilot projects provide the best example of the levels of support needed for focused regional efforts. Two organizations each received one-year

grants from SPO, a staff member served as a state agency liaison with the group, and occasionally assisted with meeting planning and facilitation. The regional groups carried out activities such as: compiling and creating GIS map layers, identifying conflicts and issues in their region, and leading community discussions on improved local management. Both pilot projects were limited by the small amount of monetary support available and the one year duration of the grant support. Provided federal funds are available, two years of support at higher levels should be considered.

Tasks: Determine State regional nearshore management priorities and create a Request for Proposals that targets the type of projects most useful in improving nearshore resources, and in furthering ecosystem management principles. Fund and/or provide staff support to grantees. At the end of the funding, assess success of the project, lessons learned and next priorities.

Timeframe --

March 2007 Determine funding available June 2007 Determine regional priorities

July 2007 Issue RFP

Sept 2007- 2009 Conduct regional projects

December 2010 Assess results, determine next steps

Cost -- Minimum \$25,000 annually for each funded project (CZM funds)

DRAFT

### Goal E-- Increase the amount, availability and accessibility of nearshore data and information

#### Introduction

Limitations in scientific data about the nearshore are often cited as a major constraint in moving forward with improved nearshore management. We found that there are indeed major limitations in data availability, data exchange and marine GIS. Appendix G Marine GIS Needs Assessment and Appendix H, Data and Information Needs Report informed these recommendations. These recommendations are aimed at addressing the identified gaps.

#### Recommendation E-1: Create a Long-Term Coastal Marine Science Plan

The Department of Marine Resources should lead an initiative to bring together representatives from DEP, DMR, MGS, SPO, IFW, DOC, municipalities and NGOs who work in the marine environment to develop a long-term plan for coastal marine science. This will help fill the identified gap in availability of data and information. The plan would consist of several components, each listed as a separate task below.

#### Task 1: Conduct sector-specific research and monitoring needs assessments

The goal of this assessment is to identify and prioritize top research and monitoring needs that address nearshore coastal management. The assessment will incorporate needs from various marine and nearshore entities (state and local governments, industry, non-profits). The research and monitoring needs assessment will put Maine in a positive position to seek funding through grants, programs, and partnerships. More importantly, though, it will guide policy makers and program managers by identifying real needs in the context of all.

Timeline – 1 year

Cost ~ 1 FTE equivalent or \$50,000

#### Task 2: Develop a human use and resource atlas

Coastal and bay management suffers from lack of information on the location and condition of coastal resources as well as the location and pressure of their use. This atlas will be GIS-based and dynamic. Information will be compiled from various sources and incorporate both quantitative and local knowledge. It will be useful in setting priorities and identifying ecological relationships, especially between habitat requirements and species and their vulnerability to human exploitation. Once the base atlas has been developed, it can be periodically updated as new data from the larger coastal monitoring program is gathered.

Timeline – 5 year

 $Cost \sim 1 FTE - $60,000/yr$ 

#### Task 3: Compile a baseline inventory

There is much information that has already been collected but neither compiled nor digitized that can help decision makers assess changing conditions in our coastal systems. For example, the Maine State Archives contains Critical Areas Program files that

characterize intertidal benthic communities along the entire coast. These are in paper form and not easily accessible. Older data need to be made available digitally. Funding must be made available to prioritize, catalogue and digitize earlier publications and data sets so that the information contained is accessible for use by resource managers and scientists.

Timeline – 1 year Cost ~ 1 FTE - \$60,000

#### Task 4 – Establish Long-term Monitoring Stations

Distinguishing natural variability from that caused by humans is important. Trying to manage natural events is futile and resources are better spent on managing those impacts that are truly manageable. Long-term monitoring, although not glamorous, is essential in creating long time series that documents the ebbs and flows of nature. A network of index stations would monitor changes in living resources and physical and chemical parameters of sediments and water.

Timeline – Ongoing

Cost ~ \$200,000/yr. (multi-agency and NGO partnership)

#### Task 5 – Re-establish a state marine research funding program

In the late 1980s, the Legislature established a marine research fund to support the research and monitoring plan of the Maine Marine Research Board. The fund was not well known and rarely used. This new fund would be dedicated to funding coastal marine research and monitoring, and would be supplied with money from voluntary consent agreements, and donations from natural resource damage assessments, nongovernment contributors including commercial and recreational marine industries and conservation NGOs. Dispersements would be used to address the sector based needs identified in Task 1.

Timeline – ongoing Cost - \$0

#### **Recommendation E-2: Engage in an Information Exchange Initiative**

The Maine State Planning Office should lead an initiative to identify information exchange needs and develop delivery and exchange mechanisms that will provide wide access to coastal marine data. The initiative would consist of the following components:

### <u>Task 1: Identify an information technology (IT) based data distribution method and train</u> users

A careful study and analysis must be carried out to determine the most cost effective means to distribute information via the web to local and regional entities. There is a wide range of IT options available but dollars will be needlessly spent if the target audience is not able to take advantage of new resources. Key investments in hardware, software, and training must be made at the regional level.

Timeline – 2yr Cost ~ \$100,000/yr

#### Task 2: Develop data standards and metadata

To make data exchange most useful, data needs to be created with common standards and associated with good documentation or metadata. Data standards such as those developed by the Maine Geolibrary for parcel data will need to be established for all types of data sets and FGDC compliant metadata should accompany all GIS data sets. Timeline – 2yr

 $Cost \sim 1 FTE - $60,000/yr$ 

#### Task 3: Develop a bay management information portal

Develop a portal similar to that used by Chesapeake Bay Program (<a href="http://www.chesapeakebay.net/">http://www.chesapeakebay.net/</a>) to provide access to the best available information and to foster communication among those with interested in bay management. The portal should provide simple tools for data and information access, as well as background and updates on regional bay management initiatives. It should be integrated with InforME (<a href="http://www.maine.gov/informe/">http://www.maine.gov/informe/</a>) and also take advantage of new, innovative regional and national information technology such as those being explored by the Gulf of Maine Ocean Data Partnership.

Timeline – 3yr Cost ~ \$100,000/yr

#### Maine Marine Geographic Information System

#### **Recommendation E-3: Create a Robust Marine GIS in Maine**

Maine Department of Marine Resources should take a leadership role in coordinating and advocating for better marine GIS throughout Maine and the Gulf of Maine. The Marine GIS Needs Assessment suggested that most needs identified would benefit from better coordination and planning at the state level, through DMR, and that the Maine GeoLibrary and MEGIS could offer the organizational structure to fully integrate marine GIS with other GIS activities in the state.

### <u>Task 1 – Engage in a focused effort to develop marine GIS data layers, standards and exchange</u>

Marine GIS lags behind land-based GIS in terms of standards and available data. Marine GIS has standards different than those developed for land-based GIS data. Only through a concerted and specific focus will Maine be able to develop marine GIS robust enough to aid in coastal understanding and decision making. Furthermore, there is not enough ecological or social data at a bay level to manage intelligently. In order for bay management regional initiatives to be successful, the State must help by collecting and compiling marine GIS in a way that enables bay level organization of data, when relevant. Additional GIS staff based at DMR would be needed to manage and coordinate this effort. As data are developed, this marine GIS could be integrated into the MEGIS and the GeoLibrary so that it is easily accessible to others. The State should develop Web Mapping Services such as ArcIMS applications or other OpenGIS services that can be used in support of marine GIS.

Timeline -3 yrs Cost  $\sim $150,000/yr$ 

#### Task 2 – Provide support to existing regional resource centers

Two GIS needs assessments and both bay management pilot projects pointed to the need to have regional GIS resource centers to support regional initiatives. Most local groups do not have the capacity and knowledge to find and analyze data on their own, but presently State staff cannot dedicate the time needed to help individual groups. A regional community GIS center is one way to provide this link. The MCPI has provided trial support to three such regional centers, and the Applied Geographics County Needs Assessment suggested using county government offices for such centers (although no work has begun on this yet). The state should evaluate the effectiveness of and provide additional support (training, funding, and data) to the pre-existing regional resource centers most likely to be able to assist regional bay management initiatives. If a gap exists along the coast (e.g., Frenchman's Bay area), the State could look to supporting an existing group to could become a resource center. The State will never be able to manage at fine scales without local capacity. Supporting resource centers will build local capacity and will equally benefit State resource managers as it does regional centers.

Timeline – Ongoing Cost - \$150,000/yr



### Goal F – Increase the amount of funding and the diversity of funding sources to support increased nearshore management efforts.

While implementation of a number of this report's recommendations could be accomplished within current projections of existing budgeted resources, work on others will require identification of new sources of support. Table [X], below, provides an overview of state capacity and funding needs and potential sources of support to address the report's nearshore management recommendations. As indicated, federal Coastal Zone Management Act (CZMA) grant funds may be available to support implementation of some of the report's recommendations. Some CZMA grant funds (CZMA Section 306) may be budgeted annually to support select nearshore management activities. Funds available under Section 309 of the CZMA must be used for changes to improve the State's coastal program in accordance with the State's five-year coastal plan. The current five year plan, approved by NOAA in July 2006, following interagency consultation and public comment, already includes several bay management efforts.

Reasonably available federal CZMA funds alone are not adequate to implement this study's recommendations. Under the oversight of the Council's marine policy committee, see Recommendation A-2, above, state agencies should explore additional funding support options. Identification of such options and provision for them in agencies' budgets, e.g., through the interagency strategic planning recommended above, is important to ensuring continuing progress and productive collaboration on nearshore management. Potential options meriting further consideration include changes in leasing fees, use of mitigation funds or penalties and fines generated through the regulatory process, and state grants under the growth management program to support regional initiatives, including one or more pilot projects.

Assessment of potential revenue to support nearshore management, particularly development and maintenance of information resources related to decision making and planning for submerged lands, should include evaluation of options to ensure that submerged lands leasing fees are equitable and adequate to support state stewardship and management of Public Trust resources. PL 2005 c. 550, section 8, directs the Department of Conservation "to review the rent structure for leases under the submerged lands program" and report its recommendations, including "options for increasing lease revenue significantly", to the Legislature's Agriculture, Conservation and Forestry Committee in January 2007. The Department should include in its recommendations to the Committee equitable increases in submerged lands lease fees sufficient to provide a sustainable source of state support for harbor management and resource mapping and related data collection activities that would facilitate avoidance and minimization of use conflicts and protection of traditional, Public Trust- related uses of state-owned submerged lands and coastal waters.

Recommendation F-1 Maintain current levels of funding for existing state priorities in the areas of coastal, environmental and marine resource management and work to secure additional sources of support for enhanced programming.

Task 1 Work with nongovernmental partners to build support for maintenance and enhancement of current budgets for coastal and marine management

Timeframe – Ongoing

Cost - SPO Staff time

Task 2 Work with state and federal agencies and the NGO community to explore additional sources of revenue for nearshore studies, monitoring, planning and management

Timeframe – Ongoing

Cost - SPO staff time

Task 3 Submit a summary of nearshore data and information needs to the Department of Conservation's Submerged Lands program for use in that program's report to the Legislature on the lease fee structure.

Timeframe - December 2006

Cost - SPO staff time

Task 4 In partnership with DOC, work with the Submerged Lands Advisory Committee and the Legislature's Joint Standing Committee on Agriculture, Forestry and Conservation during discussions about potential restructuring of lease fees and programs that could potentially be funded with an additional revenue stream.

Timeframe – January – March 2007

Cost – SPO staff time

**Table 1: Capacity and Funding Needs for Nearshore Management** 

Item	Potential Funding Source(s)
Tem -	1 otential 1 unumg bource(s)
State Agency Staffing	
1 FTE at SPO new	CZM Section 309
.5 FTE at DMR (existing)	CZM Section 309
Other state agency staffing (in-kind)	Existing funds (via new MOUs with state
Other Staffing	agencies)
Maine Sea Grant Extension Team?	9
(facilitation and support?)	•
Regional Planning Commissions	CZM Section 306
regional Flamming Commissions	CZIVI SCCIOII 300
State Vision	
Development of Interagency Pilot	Existing funds
Strategic Plan	
Comprehensive Strategic Plan	\$20,000 CZM Section 309
LWRC Marine Policy Subcommittee	Existing funds
Linked outreach effort	\$15,000 CZM Section 309
• Elliked oddreach effort	\$13,000 CZW Section 307
Regional Initiatives	
Model ordinances and legal analysis	\$5,000 National Sea Grant proposal
Woder ordinances and legar unarysis	pending
General support, limited duration support	See staffing above
One or more regional initiatives	\$50,000/year
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Potential Sources
	CZM Section 309
	State regionalization grants
	SPO growth management regional pilots
	Submerged lands lease fees
Data and Information Needs	
Marine Science Plan	\$170,000 for one year
Long Term Monitoring	\$200,000 yr (ongoing)
Information Exchange Initiative	\$160,000 yr for 2 years
Info portal	\$100,000 yr for 3 years
Marine GIS	\$150,000 yr for 3 three years
	\$150,000 yr (ongoing)
	Potential Sources
	Submerged lands lease fees
	Maine Sea Grant research funds
	Fines and penalties; Mitigation funds
	Aquaculture lease fees
	Private Grants
	State bond issue
	Cooperative projects with NOAA, EPA,
	or other agencies

### Goal G – Adapt Maine's nearshore and coastal governance systems over time as knowledge about integrated ecosystem-based management matures

The results of this examination of Maine's nearshore waters represent only a snapshot in time. As other sections of this report state, the number and diversity of uses in our nearshore waters, the complexity of environmental problems and society's viewpoints will continue to change over time. Likewise, the practice of nearshore ecosystem-based management will evolve; more states and nations will learn how to adapt these principles into governance measures. The recommendations in the report are decidedly incremental in nature, meaning that several important shifts have been put into motion and others are expected to be needed over time.

## Recommendation G-1 Assess whether and how the implementation of this report's recommendations has been effective over time, build on successes and/or change course as needed

<u>Task 1 – Host annual meetings with regional grantees, interested stakeholders and others</u> to assess progress and to further develop in-state knowledge of ecosystem-based management.

Timeline – ongoing, annually

Cost – staff time

<u>Task 2 – Prepare periodic updates for the Land and Water Resources Council and relevant committees of the Maine Legislature.</u> Use the update process to monitor effectiveness, successes and challenges, and to bring light to new information and trend analysis. Suggest adaptations as needed.

Timeline – ongoing, biennially

Cost – staff time